REMARKS

Reconsideration and allowance of the claims in the application are requested.

Claims 1-45 are in the case.

The Abstract has been objected to because of the term "is disclosed". Claim 65 has been objected to.

Claims 1-45 have been rejected under 35 USC 102(e) as anticipated by USP 6,199,099 to A.V. Gershman, et al., issued March 6, 2001, filed March 5, 1999 (Gershman).

Claims 46 - 50 have been added to describe additional features of a method and apparatus in a wireless device to provide its user with recommendation appropriate to the device's current environment.

Before responding to the rejection, Applicants would like to distinguish Gershman from the present invention (Salmenkaita), as follows:

Gershman discloses an apparatus and method for obtaining information on a mobile computing environment comprising a distributed communication network. The apparatus includes an electronic valet, a mobile portal server as shown in Fig. 27B. An electronic valet includes is a hand-held wireless computer executing thin client software. A thin client application allows the valet to execute many different software applications without the need for a large amount of internal memory and storage capacity. The valet receives input data from sensors, GPS, camera, microphones and other user inputs integrated with the wireless handheld device. A pattern template is created to find the structure of a frame located in a search engine. Adding templates improves the query to administer the search engine. The query is created on a thin client software based in part on sensor input and user inputs. The valet transmits the query via an antenna to a mobile portal. The portal processes the query received from the valet and

forms a new message based on the message received. The portal determines the appropriate third-party service provided to transmit the new message to, based upon the content of the query received from the valet and then transmits the new message. The third-party provider performs the appropriate service and transmits the results back to the portal. The portal then forms a message based upon the data received from the provider and transmits the message to the valet. The response is sorted by the thin client software, based on the pattern template and the resulting information is displayed to the user inputs. Greshman fails to disclose elements of Salmenkaita, as follows:

- A. Gershman discloses creating a pattern template for improving a search query to a search engine, where the pattern template specifies phrases selected because they have a high probability of appearing in a search result. The pattern template also serves to screen out results, which do not match the pattern template. In contrast, Salmenkaita discloses a context inference engine using adaptaptive and continuous learning based on sensor signals characterizing the current environment of a wireless device. Gershman fails to disclose a context inference engine using adaptive and continuous learning for characterizing the current user environment.
- B. Gershman discloses mobile portal receiving the message based on sensor signals and user input and accessing third-party service provider for a response, which is returned to a valet for processing using a pattern template. In contrast, Salmenkaita discloses a user wireless device accessing a network server, via a distributed network to provide recommendations regarding the current user context report activity selected by the user. Gershman fails to disclose a network server providing recommendations to a user based on context- activity pair where the context is determined by a context inference engine.

C. Gershman discloses an intelligent agent coordinator that monitors user activities; handles information requests; maintains a user's profile and routes information to and from the user and to and from other respective agents. The user profiles contain extensive information about the user. Information is a blend of user specified data and information that the intelligent agent coordinator gathers. In contrast, Salmenkaita discloses providing context activities pairs to a network server without identifying the user to preserve the privacy of the user. The network server has a database of other context activity pairs for providing recommendations to the user based on similar requests of the user. Gersham fails to disclose protecting the privacy of users for context activity pairs processed by the network server.

Summarizing, Gershman discloses a system and method for obtaining information in a mobile computing environment by (a) creating a query using a thin client application based in part on sensor information and user input including user identity; (b) querying the network for a response to the query, and (c) filtering the response with a pattern template. Gershman fails to disclose a wireless device providing recommendation to a user for context activity pairs where (a) the current environment of the user is determined by a context inference engine, and (b) a database is searched to provide recommendations using the context activity pair without disclosure of the user identity.

Now turning to the rejections, Applicants responds to the indicated paragraphs of the Office Action, as follows:

REGARDING PARAGRAPH 1:

The term "is disclosed" has been deleted from the Abstract. A word count of the Abstract indicates the total number of words is less than 150.

Withdrawal of the rejection to the Abstract is requested.

REGARDING PARAGRAPHS 2/3:

Claims 1-4 and 25 include elements not disclosed in Gershman, as follows:

- a. Claims 1, 22 and 25:
 - (i) "processing of the sensor signals with a context inference engine"

Gershman, at col. 42, lines 1-25, discloses a client reporting subsystem that allows for an automatic reporting of error conditions encountered during processing. The system indicates when a reportable event has occurred. A reporting system requests information about the event and creates a report. The report signals a client communication subsystem that the report is ready to be sent. Applicants can find no disclosure in the cited text describing a context inference agent seeking inferences from all sensor inputs, based on where the wireless device is located, as described in the specification at page 17, line 30, continuing to page 18, line 20. Gershman fails to disclose a context inference engine.

(ii) "outputing a current context result from the processing the context inference engine."

Gershman, at col. 35, lines 30-60, discloses a detailed interaction between a consumer and an integrator involving a supplier. The user accesses a web browser to request product and pricing information from the integrator. The user's preferences and personal information are obtained from the integrator's custom profile database and returned to the server. The requested product information is extracted from the supplier database and customized for the particular customer. The server updates the application customer database with the inquiry information about the customer. The product and pricing information is formatted at a web page



and returned to the customer's browser. Applicants can find no disclosure in the cited text outputting a context result describing the user's current environment, as described in the specification at page 17, line 30 and continuing to page 18, line 20. Gershman outputs an intensive value network for coordinating the delivery of products and services for a user. The intensive value does not suggest an inference engine outputting current environment contacts for a user.

(iii) "forming a context activity pair by selecting an activity and paring it with the current context results."

Gershman, at col. 38, lines 21-31, discloses an awareness machine, which reflects a constantly updated state-of-the-art world, by continually receiving a wireless trickle of information. The information is mined and processed by a suite of intelligent engines, consist of mail messages, news that meets use preferences, scheduled updates, background information on upcoming events, as well as weather and traffic. Applicants can find no disclosure in the cited text related to combining a user activity and a device environment and seeking a ecommendation in a network server for implementing the context activity pair. Gershman fails to disclose pairing a current context-activity pair for the user, as described in the specification at page 9, line 18 and continuing to line 29. Gershman fails to disclose selecting an activity and combining it with a current context for a user.

(iv) "searching a database of recommendations using the current text activity pair"

Gershman, at col. 31, lines 1-55 discloses a server creating a web page for a client within an egocentric interface. The server gets the layout and content preferences for that particular user from a database keyed-off of a unique user I.D. stored in a user browser and user profile database. The server retrieves the content for the page from a content database. The relevant

user-centric content, such as calendar, email, contact list and task list are retrieved. The query to the database utilizes the user content preferences and stores the part of the user profile to filter the context as it returns. The content that is returned is formatted into a web page and returned to the client for display. Applicants can find no disclosure in the cited text related to searching a database of recommendations related to context activity pairs, as described in the specification at page 12, line 4-19. Gershman fails to disclose providing recommendations for contact activity pairs where the database search indicates the number of times the recommendation is made to other users for corresponding contact activity pairs, as described at page 10, lines 16-38.

(v) "providing recommendation to the user in response to the searching step"

Gershman, at col. 28, lines 1-23; col. 30, lines 64-67 and col. 31, lines 1-19, discloses sending a query to an intention database via a search engine, the database storing information about the types of products and services needed to fulfill the intention. Gershman discloses providing a product in response to the user request. In contrast, Salmenkaita discloses searching a database of recommendations relative to current context - activities pairs to select recommendations, which responds to the user requests without identification of the use.

Gershman fails to disclose providing appropriate recommendations made in the past to other users for selection by the user. Without a disclosure in Gershman of the previously described elements, there is no basis for a rejection of claims 1, 22 and 25 under 35 USC 102(e).

B. Claims 2 & 23:

(i) "processing of the sensor signals with a context inference engine embodied as a program instruction executed within a user's wireless device."

Withdrawal of the rejection and allowance of claims 1, 22 and 25 are requested.

Gershman, at col. 51, lines 19-44 discloses an electronic valet using a thin client operating system. The valet receives input data from sensors and forms a message based on the sensor data and user input for processing by a mobile portal. Applicants can find no disclosure in the cited text related to a context inference engine determining a user's current environmental state, as described at page 18, line 1-20.

Without a disclosure in Gershman of a context inference engine, there is no basis for the rejection of claims 2 and 23 under 35 USC 102(e). Withdrawal and allowance of claims 2 and 23 are requested.

C. Claim 3 & 24:

(i) "a context inference engine is embodied as program instructions executed within a separate network server"

Gershman, at col. 51, lines 40-50, discloses a mobile portal, which transmits a valet message to a third-party service provider which returns a message to the valet based on the third-party service provider's response. The Gershman fails to disclose a context engine for the same reasons as described for claim 2.

D. <u>Claim 4</u>:

Claim 4 further limits claim1 and is patentable on the same basis thereof.

E. Claim 5:

Claim 5 depends upon claim 3 and is patentable on the same basis thereof.

Withdrawal of the rejection and allowance of claim 5 is requested.

F. Claim 7:

Claim 7 further limits claim 1 and is patentable on the same basis thereof.

G. Claim 8:

(i) "the signals from the user's wireless device are sent to the server without any user identification."

Gershman, at col. 58, lines 8-27, discloses a mobile portal server utilizes customer intelligence to respond to user needs. Intelligent agent software searches through a third-party provider to determine the most suitable for a user taken into consideration the customer profile and using the user profile. Gershman fails to disclose processing a requests without user identification for privacy reasons, as described in the specification at page 2, lines 25-36..

Without a disclosure in Gershman, related to the foregoing elements, there is no basis for a rejection of claim 8 under 35 USC 102(e). Withdrawal and allowance of claim 8 are requested.

H. <u>Claims 9 & 37</u>:

(i) "providing the recommendation in a separate server in response to context activity pair information..."

Gershman, at col. 29, lines 1-22 discloses web-based comparison shopping in a conventional physical non-web retail environment. A wireless device is combined with a miniature barcode reader for reading the Universal Product Code (UCP) barcode on a product. The wireless device transmits the barcode to a server module on a web server, which converts the barcode into a product to find shopping and availability. Applicants can find no disclosure in the related text related to providing a separate server providing a recommendation in response to context activity pair information provided to the server from a wireless device.

Without a disclosure in Greshman related to the previously described elements, there is no basis for a rejection of claims 9 and 37 under 35 USC 102(e). Withdrawal and allowance of claims 9 and 37 are requested.

I. Claims 10 & 38:

- (i) "maintaining a database of the context activity pair database by the server"

 Gershman, at col. 34, lines 58-66, discloses accessing a profile database for user profile information on a gateway and showing that the information is only given out when the profile owner specifically grants permission. Applicants can find no disclosure in the cited text related to storing a database of content activity pairs. Accessing a centrally stored profile database does not disclose or suggest a context activity period database.
- (ii) "associating in the database the context-activity pair information with appropriate recommendations made in the past to many users"

Gershman, at col. 34, lines 9-42, discloses a personalized product report service customized for each user based on a user profile. An algorithm determines the personalized product rating for a user. The product ratings are determined for the number of users and in turn returned to the user as a product report. Applicants submit that product rating reports are not equivalent to context activity pair information, as descried in the specification at page 3, lines 8 17.

Without a disclosure in Gershman related to a context activity pair or recommendations made in the past to many users, there is no support for a rejection of claim 10 and 38 under 35 USC 102(e). Withdrawal and allowance of claims 10 and 38 are requested.

J. Claims 11 & 39:

Claim 11 further limits claim 10 and is patentable on the same basis thereof.

Withdrawal of the rejection and allowance of claims 11 and 39 are requested.

K. Claims 12, 29 & 40:

Claims 12, 29 and 40 further limit claim 11 and are patentable on the same basis thereof.

Withdrawal of the rejection and allowance of claims 12, 29 and 40 are requested.

L. <u>Claims 13, 30 & 41</u>:

Claims 13, 30 and 41 further limit claim 12 and are patentable on the same basis thereof.

M. Claims 14, 31 & 42:

Claims 14, 31 and 42 further limit claims 13 or 37 and are patentable on the same basis thereof.

N. Claims 15, & 43:

Claims 15 and 43 further limit claims 1 and 41, respectively, and are patentable on the same basis thereof.

O. Claims 16, 32 & 44:

(i) "filtering new recommendations from the previous recommendations and providing the new recommendations to the user."

Gershman, at col. 30, lines 67 and col. 31, lines 1-5, discloses an intention database that stores all of the information about the structure of the intention and types of products and services needed to feel the intention. A Content database stores all of the information related to the intention, such as, advice, referral information, etc. In contrast,

Salmenkaita discloses accessing a history log of previous contact activity pairs, without advice for selecting a contact activity pair

Gershman, at col. 33, lines 53-67, and col. 34, lines 1-7, discloses a process for generating a web page displaying statistics prepared by an agent to emotionally appeal to a user to incur certain behaviors via template matching described in Gershman, at col. 13, line 60, continuing to col. 18, line 30. In contrast, Salmenkaita discloses filtering recommendations, which unify new and significant information, not matching the recommendation with a template employed by a user. Gershman fails to disclose accessing previous recommendations of context activity pairs and filtering the recommendations for redundant information to display only new and significant recommendations, as described in the specification at page 10, line 40 continuing to page 11, line 10.

Without disclosure in Gershman relative to filtering context activity pairs for new information, there is no basis for the rejection of claims 16, 32, and 44 under 35 USC 102 (e). Withdrawal of the rejection and allowance of claims 16, 32 and 44 are requested.

P. Claims 17, 33 and 45

(i) "filtering recommendations using the ratings and providing the filtered recommendations to the user."

Gershman at col. 33, lines 53 - 67 and col. 34, lines 1 -7 was distinguished from Claims 16, 32 and 44, as discussed above. Claims 17, 33 and 45 further limit claims 16, 32 and 44 and are patentable on the same basis thereof.

Q. Claims 18 & 34:

(i) "providing the recommendation to an application program".

Gershman at col. 1, lines 51 - 53 and col. 31, lines 19 - 28 discloses wireless application protocol for installing data capability into wireless phones, and a product database, which stores all product related information, features availability and pricing. Applicants can find no disclosure in the cited text related to providing recommendation to an application program relative to a context activity pair. In any case, claim 18 and 34 depend upon independent claims 1 and 27, respectively, and are patentable on the same basis thereof.

R. Claim 19:

(i) "providing to user control over the privacy of the user's information within the network server."

Gershman, at col. 30, lines 30-63, discloses egocentric inter-face and intention value network architecture for the complexity of trying to secure, scalability and privacy. Applicants can find no disclosure in the cited text featuring privacy control by the user information within the network server, as described in the subject application, page 13, line 4 continuing to page 14, line 7.

Gershman fails to disclose providing the user control over the privacy of the user information in the network server, and in fact teaches away from privacy as described at col. 30, lines 48 - 51.

Without disclosure in Gershman relative to privacy control in a network server, there is no basis for the rejection of claim 19 under 35 USC 102 (e). Withdrawal of the rejection and allowance of claim 19 are requested.

S. <u>Claim 20</u>:

(i) "maintaining the database as a context-activity pair database by the server, which contains no personal information about the user;

associating in the database the context-activity pair information with appropriate recommendations made in the past to many users."

Gershman, at col. 58, lines 8-27, discloses a mobile portal server utilizing intelligent agents to obtain encrypted data by a third-party in response to a user request. The intelligent agents use the user profile to obtain information contrary to what is stored in the user profile. col. 58, line 27-32. Gershman discloses an agent has an option to use a user profile. In contrast, Salmenkaita does not provide user information and the user has no option to use the user information. Page 2, line 32 continuing to line 35. Gershman, at col. 34, lines 9-42 discloses a personalized product report service, which provides the ratings from users about product quality and desirability. The ratings are personalized to the user. In contrast, Salmenkaita discloses database of contact activity pairs and not product ratings and recommendations from user's information. Gershman fails to disclose a database of contact activity pairs without user personal information and appropriate recommendation made in the past by other users.

Without disclosure in Gershman relative to maintaining a database with user information, there is no basis for the rejection of claim 20 under 35 USC 102 (e). Withdrawal of the rejection and allowance of claim 20 are requested.

T. Claim 21:

(i) " making new recommendations to the user in response to the context-activity pair information submitted by the wireless device; and

gathering the new recommendations and adding them to the database without any personal information about the user."

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Gershman, at col. 39, line 7-25 and lines 33-60 and col. 38, lines 44-61, discloses maintaining user profiles for monitoring user activities. Gershman fails to disclose making new recommendations to the user because the pattern matches the information to the user pattern template. In contrast, Salmenkaita discloses filtering the database information for new information.

Gershman, at col. 58, lines 8-27, provides an intelligent agent the option of using a user profile, as discussed in connection with the response to claim 16.Gershman fails to disclose making new recommendations to the user and adding them to a database without any personal information about the user.

U. Claim 26:

Claim 26 describes claim 21 in system format. As discussed in connection with the response to the rejection of claim 1, Gershman fails to disclose selecting an activity and pairing the activity with sensor information generated by a context inference agent searching in a database of new recommendations relative a wireless device and providing a new recommendation to the user. Gershman fails to disclose context activity pairs based on an inference engine for searching in a database of recommendations relative to the context activity pair and providing new recommendations to a user. A mobile portal server does not serve as a context inference engine because server uses customer intelligence through data memory and pattern recognition. Whereas, Salmenkaita discloses a context inference engine, which determines the environmental state of the user based on sensor signals. Nor is the intelligent agent coordinator a context inference agent, which monitors user's activities; handles information requests; maintains the user profile and routes information to and from users. The functions of the intelligent agent coordinator are not related to determining the user's

environmental states from sensor signals, as described in the specification at page 17, line 30 continuing to page 18, line 35. Gershman fails to disclose the elements of claim 26 and does not support the rejection of claim 26 under 35 USC 102(e).

Withdrawal of the rejection and allowance of claim 26 are requested.

V. Claim 27:

Claim 27 is a method and embodiment of claim 26 and is patentable on the same basis.

Withdrawal of the rejection of claim 27 under 35 USC 102(e) and allowance thereof are requested.

W. <u>Claim 28</u>:

(i) "gathering a new recommendation and adding them to the database without including any user personal data."

Gershman, at col. 58, lines 8-27, discloses customer agent has the option of using a user profile for the reasons described in the response to the rejection of claim 21. Moreover, Gershman does not provide new recommendation because pattern matching is employed. Salmenkaita discloses providing the user new information by excluding matching information. Gershman fails to disclose providing a new recommendation and adding the recommendation to the database without using personal data. The rejection of claim 34 under 35 USC 102(e) is without support. Withdrawal of the rejection and allowance of claim 34 is requested.

X. Claim <u>35</u>:

(i) "providing at least portions of the database to a third party service provider."

Gershman, at col. 29, lines 1-22, discloses a wireless phone equipped with a

barcode reader scanning products to transmit barcode to a web server for contacting a third-party

website to find price, power shipping and availability information on a product from various web suppliers. Applicants can find no disclosure in the cited text relating to providing a database of recommendations to a third-party service provider.

The rejection of claim 35 is without support. Withdrawal of the rejection and allowance of claim 35 are requested.

Y. Claim 36:

(i) "accessing a set of related service history items from a history log; forming context-activity pair information from the set of current context results and the set of related service history items; searching a database of recommendations using the context-activity pair information; and providing recommendations to the user in response to the searching step."

Gershman, at col. 38, lines 21-31 discloses an awareness machine, which provides a constantly updated state of the owner's world by continually receiving a wireless trickle of information. The information is mind and processed by a suite of intelligent agents. Applicants can find disclosure cited text to a context inference engine determines the environmental state of a user for a selected activity based on sensor signals processed by the inference machine.

Gershman, at col. 58, lines 1-23, discloses a mobile portal server utilizing customer intelligence to respond to user requested, based on data, mined and pattern recognition by the user to obtain the desired information. Applicants can find no disclosure in the cited text of combining a selected activity as a context generated by an inference engine using sensor signals. The cited text only discloses searching third-party providers by agent software to determine the most suitable product for the user taking into consideration the customer's profile contained in the customer data.

Without a disclosure in Gershman of the previously described elements, there is no support under 35 USC 102(e) for the rejection of claim 36.

Withdrawal of the rejection and allowance of claim 36 are requested.

REGARDING PARAGRAPH 4:

Applicants have reviewed Linden (US Publication 2002/01988281) and Delgado (US Publication 2002/0052873) and conclude they do not disclose the elements of claims 1-50 and are only cumulative to the cited art.

PATENTABILITY SUPPORT FOR NEW CLAIMS 46-50:

Claim 46 further limits claim 1 to define the context inference engine utilizing adaptive and continuous learning to search a database of context activity pairs while maintaining the privacy of the use, and filtering the recommendations to identify new and significant information as new recommendations.

Applicants can find no disclosure in Gershman related to the elements of claim 46 Claim 47 further limits claim 46 by defining a metadata vector of sensor signals for processing by a server. Applicants can find no disclosure in Gershman related to a medadata vector being processed by a server.

Claim 48 further limits claim 46 by defining a privacy user interface to enable the user to set privacy policies related to access to the context inference engine. Applicants can find no disclosure in Gershman related to a privacy user interface for a privacy control element.

Claim 49 further limits claim 46 by excluding user personal data from a database from context activity pairs. Applicants can find no disclosure in Gershman related to a database of context activity pairs, which excludes user personal data.

Claim 50 further limits claim 46 by describing contact activity pair data sets being provided to a third-party for market research. Applicants can find no disclosure in Gershman related to marketing data sets to a third-party for research purposes.

Claims 46-50 clearly define elements not in Gershman and are believed patentable in describing new and unobvious methods. Entry of claims 46-50 and allowance thereof are requested.

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CONCLUSION:

Having distinguished claims 1-45 from the prior art and supported the patentability of

new claims 46-50, Applicants request entry of the amendment, allowance of the claims, and

passage to issue of the case.

AUTHORIZATION:

The Commissioner is hereby authorized to charge any additional fees which may be

required for the timely consideration of this amendment under 37 C.F.R. §§ 1.16 and 1.17, or

credit any overpayment to Deposit Account No. <u>13-4503</u>, Order No. 4208-4012.

Respectfully submitted,

MORGAN & FINNEGAN, L.L.P.

Dated: September 15, 2003

By:

Joseph C. Redmond, Jr.

Registration No. 18,753

(202) 857-7887 Telephone

(202) 857-7929 Facsimile

Correspondence Address:

MORGAN & FINNEGAN, L.L.P.

345 Park Avenue

New York, NY 10154-0053